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10/695,527	10/28/2003	Richard A. Hines	774317-0002	6401

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EXAMINER	
OU, JING RUI	
ART UNIT	**PAPER NUMBER**
4123	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/695,527	HINES ET AL.	
	Examiner	Art Unit	
	Jing Rui Ou	4123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *22-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-31* are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 October 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/28/2003 and 01/06/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the non-provisional application filed on 10/28/2003. Claims 1-31 are pending. Claims 1, 22, 27, and 31 are independent. Of the pending claims, Claims 22-31 are withdrawn from consideration.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-21, drawn to a pleated stent assembly, classified in class 623, subclass 1.11.

II. Claims 22-26, drawn to a medical stent, classified in class 623, subclass 1.15.

III. Claims 27-30, drawn to a method for delivering a pleated stent assembly, classified in class 623.

IV. Claims 31, drawn to a method for making a pleated stent assembly, classified in class 623.

3. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require the body section to be substantially non-expandable radially. The subcombination has

separate utility such as the stent in a combination with a sleeve covers it can be self-expanded without using a balloon upon removal of the sleeve.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

4. Inventions III and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by another and materially different apparatus, such that the method can be used to deliver a non-cylindrical stent.

5. Inventions IV and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process

(MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process, such as pleating the balloon; pleating the stent; inserting the pleating balloon into the pleated stent.

6. Inventions III and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by another and materially different apparatus, such as the method can be used to deliver a pleated stent without the anchor section.

7. Inventions IV and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process, such that a medical stent can be made without co-pleating with a balloon.

8. Inventions III and IV are directed to related processes. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the

pleated stent assembly that is delivered by this method can be made from different process. The pleated stent assembly can be made by pleating the balloon; pleating the stent; inserting the pleating balloon into the pleated stent. In addition, the pleated stent assembly formed by this method can be used with different method. The pleated stent can be delivered by obtaining a pleated stent assembly; attaching the pleated stent assembly to a catheter; advancing the catheter to a desired position in a body vessel; deploying the pleated stent assembly by inflating the balloon; deflating the balloon; removing he balloon from the stent and the vessel. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

9. During a telephone conversation with Penny Flicer on 09/27/2007 a provisional election was made with traverse to prosecute the invention of I, claims 1-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above

and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

(a) the inventions have acquired a separate status in the art in view of their different classification;

(b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement

will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Information Disclosure Statement

11. The information disclosure statements filed on 10/28/2003 and 01/06/2006 fail to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

12. On paragraphs [0042] and [0047], US Patent Application No. 10/452,891 is now US Patent 6,904,658 B2.

Drawings

13. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference number 26 is not found in Fig. 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

14. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

15. The disclosure is objected to because of the following informalities: A) On lines 9 and 10 of page 12, the term "think" is misspelled and should be changed to "thick". B) In Para.[0040], the reference number for "pattern 26" is not found in the drawings. C) On paragraphs [0042] and [0047], US Patent Application No. 10/452,891 became US Patent 6,904,658 B2 and the specification should be updated to reflect this change.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claim 1-3, 5, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Boussignac et al (US Pat. No.: 6,056,767).

In regard to Claim 1, Boussignac et al discloses a pleated stent assembly comprising: a balloon (1, Fig. 1); and a tube (2, Fig. 1) having an original diameter (It is well known in the art that a stent has an original diameter, Col. 4, lines 12-14, and Col. 5 lines 18-19), wherein at least a portion of said balloon is contained within said tube (Fig. 7), wherein said tube and said balloon are co-pleated along longitudinal pleating lines to form a substantially cylindrical pleated tube/balloon assembly (Fig. 1 and Fig. 2 and Col. 2, lines 47-50) having a delivery width, and wherein said delivery width of said assembly

is less than said original diameter (It is well known it the art that tube/balloon assembly has a delivery width which is less than its original diameter) of said tube.

In regard to Claim 2, the tube is formed from a material (Col. 4, lines 6-7) that undergoes sufficient plastic deformation (Col. 4, lines 4-5) along said pleating lines (line L, Fig. 7) to substantially maintain said delivery width of said tube/balloon assembly.

In regard to Claim 3, the device further comprises a tubular sleeve (cover, Col. 4, line 26) substantially surrounding said tube/balloon assembly (Col. 4, lines 26-30) to substantially maintain said delivery width of said tube/balloon assembly (Col. 4, lines 39-40).

In regard to Claim 5, the tube is flexible along its longitudinal axis (Figs. 1-2).

In regard to Claim 18, the tube is a stent (2, Fig. 1 and see Abstract).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. Claims 1-14, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drasler et al (US Pat. No.: 6,287,335 B1) in view of Boussignac et al (US Pat. No.: 6,056,767).

In regard to Claim 1, Drasler et al discloses a pleated stent assembly comprising: a balloon (300, Fig. 4E); and a tube having an original diameter (It is well known in the art that a tube/stent has an original diameter), wherein at least a portion of said balloon is contained within said tube (260, Fig. 4E), wherein said tube (260) and said balloon (300) are pleated along longitudinal pleating lines to form a substantially cylindrical pleated tube/balloon assembly (Fig. 4E) having a delivery width (235), and wherein said delivery width of said assembly is less than said original diameter (110, Fig. 4B and Col. 24, lines 30-35) of said tube.

Drasler et al does not appear to disclose that the tube and the balloon are co-pleated.

However, Boussignac et al explicitly disclose that the tube (Boussignac et al, 2, Fig. 1) and the balloon (1, Fig. 1) are co-pleated (Fig. 7 and Col. 2, lines 47-50).

Drasler et al and Boussignac et al are analogous art because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teaching of Drasler et al and Boussignac et al before him or her, to modify the pleated stent assembly to have the tube and the balloon co-pleated.

The suggestion/motivation for doing so would have been to ensure a regular spreading out of the stent forming element, guided by the balloon, during its spreading out by inflation (Boussignac et al, Col. 2, lines 61-62)

Therefore, it would have been obvious to combine Boussignac et al with Drasler et al to obtain the invention as specified in the instant claim.

In regard to Claim 2-14, 18, and 20, Drasler further discloses the following:

In regard to Claim 2, the tube is formed from a material (Nitinol, Col. 8, lines 9-15) that undergoes sufficient plastic deformation (260 and Col. 8, lines 49-53) along said pleating lines to substantially maintain said delivery width of said tube/balloon assembly.

In regard to Claim 3, the device further comprises a tubular sleeve (sheath, 225, Fig. 4E) substantially surrounding said tube/balloon assembly to substantially maintain said delivery width of said tube/balloon assembly.

In regard to Claim 4, the tube is formed from a material having super-elastic properties (Nitinol, Col. 8, lines 9-15).

In regard to Claim 5, the tube is flexible along its longitudinal axis (Col. 6, lines 31-35).

In regard to Claim 6, the wall of said tube comprises at least one substantially solid annular body section (metallic strands, 750, Fig. 23 and Col. 13, lines 7-10)

In regard to Claim 7, the body section is not radially expandable substantially beyond said original diameter upon inflation of said balloon (Col. 6, lines 64-67, Col. 7, lines 1-4 and 10-12).

In regard to Claim 8, the wall of said tube comprises at least one annular anchor section (245, Fig. 5), wherein said anchor section is radially expandable beyond said original diameter upon inflation of said balloon (Col. 11, lines 3-6, 21-22, and 32-39).

In regard to Claim 9, the wall of said tube comprises at least one annular anchor section (245, Fig. 5), wherein said anchor section is radially expandable beyond said original diameter upon inflation of said balloon (Col. 11, lines 3-6, 21-22, and 32-39).

In regard to Claim 10, the wall of said tube is comprised of a pattern of interconnected solid areas defining open spaces therebetween (Fig. 23 and Col. 13, lines 29-31).

In regard to Claim 11, the pattern restricts radial expansion of said tube substantially beyond the original diameter over a portion of the length of said tube (Col. 6, lines 64-67, Col. 7, lines 1-4 and 10-12).

In regard to Claim 12, Drasler et al discloses all the limitations of the claim but fail to disclose the pattern comprises greater than about 60 percent solid area in the portion of the tube wherein radial expansion is restricted. However, Drasler et al explicitly

disclose that the gaps or leakage sites (495, Fig. 13C) are small and the size of the gaps or leakage sites is dependent up the monofilament strand diameter (500, Fig 13C) as well as how tightly they are packed. The size of the gaps of leakages sites can be approximately as large as the monofilament strand diameter (Col. 49, lines 16-24). Therefore, it is obvious that the pattern comprises more than 60 percent solid area in the portions of the tube wherein radial expansion is restricted (Col. 57, lines 66-67 and Col. 58, lines 1-2).

The suggestion/motivation for doing so would be to prevent blood cellular elements from passing through the leakage sites. With small leakage sits, red blood cells and platelets can become trapped and create thrombosis that will prevent leakage from that gap of leakage site (Drasler et al, Col. 49, lines 24-29).

In regard to Claims 13 and 14, the pattern allows radial expansion of said tube beyond said original diameter over at least a portion of the length of said tube. The pattern allows radial expansion up to about 130% of said original diameter in the portion of said tube wherein radial expansion is allowed (up by 50% is the same as up to 150% of the original diameter. This covers the up to about 130% as claimed. Col. 63, lines 51-54)

In regard to Claim 18, the tube is a stent (Fig. 23).

In regard to Claim 21, the tube is formed from a biocompatible plastic (polyester ad polyurethane, Col. 25, lines 4-5)

22. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drasler et al (US Pat. No.: 6,287,335 B1) in view of Boussignac et al (US Pat. No.:

6,056,767) as applied to Claim 10 above, and further in view of Penn et al (US Pat. No.: 6,375,667 B1).

In regards to Claims 15-17, Drasler et al and Boussignac et al disclose all the limitations as taught above. Drasler et al further discloses: A) the wall of the device comprises at least one annular anchor section (245, Fig. 5), wherein the circumferential struts in said anchor section are radially expandable beyond said original diameter (Col. 11, lines 3-6, 21-22, and 32-39). B) the wall of the device comprises at least one annular body section, wherein said body section of said wall are radially non-expandable substantially beyond said original diameter (Col. 6, lines 64-67, Col. 7, lines 1-4 and 10-12).

Drasler et al and Boussignac et al do not appear to disclose the solid areas are comprised of longitudinal struts and interconnected circumferential struts.

However, Penn et al explicitly disclose a device comprised of longitudinal struts (770, Fig. 8) and interconnected circumferential struts (760 and 767, Fig. 8)

Drasler et al, Boussignac et al, and Penn et al are analogous art because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teaching of Drasler et al, Boussignac et al, and Penn et al before him or her to modify the endoprothesis of Drasler et al and Boussignac et al to include the longitudinal struts and interconnected circumferential struts of Penn et al.

The suggestion/motivation for doing so would have been that longitudinal struts could lead to a very desirable balance of lateral flexibility of the unexpanded stent and

radial rigidity of the expanded stent (Penn et al, Col. 3, lines 19-23) while the interconnected circumferential struts could enhance the lateral flexibility of the stent (Penn et al, Col. 10, lines 24-25).

Therefore, it would have been obvious to combine Penn et al with Drasler et al and Boussignac et al to obtain the invention as specified in the instant claims.

23. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boussignac et al (US Pat. No.: 6,056,767) in view of Hines (US Pat. No.: 6,019,784).

In regard to Claims 19-20, Boussignac et al discloses all the limitations as taught above but fails to disclose the tube is formed from an electroformed metal and the metal is gold.

However, Hines explicitly discloses a tube that is formed from an electroformed metal and the metal is gold (Hines, Abstract and Col. 4, lines 53-62)

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teaching of Boussignac et al and Hines before him or her to modify the tube of Boussignac et al to be formed from an electroformed metal such as gold of Penn et al.

The suggestion/motivation for doing so would have been that electroformed metal such as gold is sufficiently ductile to be radially expandable to form an appropriate intra vascular endoprosthesis and sufficiently rigid to hold its shape once the expansion force is removed (Hines, Col 4, lines 53-57).

Therefore, it would have been obvious to combine Hines with Boussignac et al to obtain the invention as specified in the instant claims.

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These prior art references includes the following:

Fischell et al (US Pat. No.: 5,697,971)

Houser et al (US Pat. No.: 6,149,681)

Burpee et al (US Pat. No: 6,179,868)

Alt et al (US Pat. No: 6,251,134)

Miller et al (US Pat. No: 6,293,959)

Desai (US Pub. No.: 2002/0007222)

Shanley (2002/0013619)

Khosravi et al (US Pat. No: 6,458,152)

Vonesh et al (US Pat. No: 6,673,102)

Anson (US Pat. No: 6,706,064)

Armstrong et al (US Pat. No: 7,056,336).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jing Rui Ou whose telephone number is (571)270-5036. The examiner can normally be reached on M-F 7:30am - 5:00pm, Alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Del Sole can be reached on (571)272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRO

JOSEPH DEL SOLE
SUPERVISORY PATENT EXAMINER
10/30/07